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10/685,169	10/13/2003	Martin Kolb	6570P003	4258

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EXAMINER

MEHRMANESH, ELMIRA

ART UNIT PAPER NUMBER

2113

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/685,169	Applicant(s) KOLB ET AL.	
	Examiner Elmira Mehrmanesh	Art Unit 2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The application of KOLB et al., for a "SYSTEM AND METHOD FOR TESTING APPLICATIONS AT THE BUSINESS LAYER" filed October 13, 2003, has been examined.

Claims 1-27 are presented for examination.

Information disclosed and listed on PTO 1449 has been considered.

Claims 13-27 are rejected under 35 USC § 101.

Claims 1-7, 13-27 are rejected under 35 USC § 102.

Claims 8-12 are rejected under 35 USC § 103.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 13-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As per claims 13-19, the limitation "system" claimed as computer listings per se, i.e., the descriptions or expressions of the programs are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized.

As per claims 20-27, the limitation "program code" is directed to non-statutory subject matter. Computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7, and 13-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Robertson (U.S. Patent No. 6,697,967).

As per claim 1, Robertson discloses a method for recording a test script (Fig. 1) comprising:

providing a user interface (Fig. 1, element 11) for entering data and triggering one or more operations to process the data (col. 7, lines 1-9)

translating the data and/or operations to a business layer format (col. 7, lines 37-42)

receiving results of the data and/or operations in a business layer format (col. 6, lines 5-9)

storing the entered data, operations and/or results in the business layer format within a test script, the test script usable to test an instance of an application at a business layer of the application (col. 5, lines 30-53) and (Fig. 3).

As per claim 2, Robertson discloses converting the business layer formatted data, operations and/or results into a location and/or language-neutral format prior to storing (col. 7, lines 37-42).

As per claim 3, Robertson discloses the location and/or language-neutral format is based on a predefined XML schema (col. 7, lines 49-54).

As per claim 4, Robertson discloses providing the translated data and/or operations to a presentation layer, the presentation layer preparing the data and/or operations according to predefined presentation logic, generating the results of the data and/or operations, and providing the results to a user interface, the user interface displaying the results of the operations to a user (col. 5, lines 30-53).

As per claim 5, Robertson discloses storing the entered data within a test data container (Fig. 4, element 44) rather than directly within the test script, the entered data accessible while testing the instance of the application via a command interface of the test script (col. 7, lines 37-42).

As per claim 6, Robertson discloses the user interface comprises a browser, the method further comprising: initializing the browser with a uniform resource locator ("URL"), the URL having a first component identifying an application from which the test script is to be recorded and a second component specifying parameters for recording of the test script (col. 7, lines 1-9).

As per claim 7, Robertson discloses one of the parameters comprises a location where said test script is to be stored (col. 8, lines 8-21).

As per claim 13, Robertson discloses a test system comprising:

a user interface (Fig. 1, element 11) to receive data and an indication of one or more specified operations to process the data (col. 7, lines 1-9)

a business layer to process the data according to the specified operations (col. 7, lines 37-42) and to generate results of the operations (col. 6, lines 5-9)

a test application program to receive results of the data and/or operations in a business layer format and to transfer the data, operations and/or results of the data and operations to a test control program (col. 6, lines 5-9)

a test script to store the entered data, operations and/or results in the business layer format, the test script usable to test an instance of an application within the business layer of the application (col. 5, lines 30-53) and (Fig. 3).

As per claim 14, Robertson discloses a conversion module to convert the data, operations and/or results into a location and/or language-neutral format prior to storing (col. 7, lines 37-42).

As per claim 15, Robertson discloses the location and/or language-neutral format is based on a predefined XML schema (col. 7, lines 49-54).

As per claim 16, Robertson discloses a presentation layer to prepare the data and/or operations according to predefined presentation logic to display the data and/or operations within a graphical user interface (col. 5, lines 30-53).

As per claim 17, Robertson discloses a test data container (Fig. 4, element 44) to store the entered data, the entered data accessible while testing the instance of the application via a command interface of the test script (col. 7, lines 37-42).

As per claim 18, Robertson discloses a browser initialized with a uniform resource locator ("URL"), the URL having a first component identifying an application from which the test script is to be recorded and a second component specifying parameters for recording of the test script (col. 7, lines 1-9).

As per claim 19, Robertson discloses one of the parameters comprises a location on a network where said test script is to be stored (col. 8, lines 8-21).

As per claim 20, Robertson discloses an article of manufacture including program code which, when executed by a processor, cause the processor to perform the operations of:

providing a user interface (Fig. 1, element 11) for entering data and triggering one or more operations to process the data (col. 7, lines 1-9)

translating the data and/or operations to a business layer format (col. 7, lines 37-42)

receiving results of the data and/or operations in a business layer format (col. 6, lines 5-9)

storing the entered data, operations and/or results in the business layer format within a test script, the test script usable to test an instance of an application at the business layer of the application (col. 5, lines 30-53) and (Fig. 3).

As per claim 21, Robertson discloses converting the data, operations and/or results into a location and/or language- neutral format prior to storing (col. 7, lines 37-42).

As per claim 22, Robertson discloses the location and/or language-neutral format is based on a predefined XML schema (col. 7, lines 49-54).

As per claim 23, Robertson discloses providing the translated data and/or operations to a presentation layer, the presentation layer preparing the data and/or operations according to predefined presentation logic, generating the results of the data and/or operations, and providing the results to a user interface, the user interface displaying the results of the operations to a user (col. 5, lines 30-53).

As per claim 24, Robertson discloses storing the entered data within a test data container (Fig. 4, element 44), the entered data accessible while testing the instance of the application via a command interface of the test script (col. 7, lines 37-42).

As per claim 25, Robertson discloses the user interface comprises a browser to perform the operations of: initializing the browser with a uniform resource locator ("URL"), the URL having a first component identifying an application from which the test script is to be recorded and a second component specifying parameters for recording of the test script (col. 7, lines 1-9).

As per claim 26, Robertson discloses one of the parameters comprises a location on a network where said test script is to be stored (col. 8, lines 8-21).

As per claim 27, Robertson discloses storing data related to the user interface, the data related to the user interface usable to perform checks on the presentation level data (col. 5, lines 35-44).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

Art Unit: 2113

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robertson (U.S. Patent No. 6,697,967) in view of Shupps et al. (U.S. PG PUB No. 20020188890).

As per claim 8, Robertson discloses a method for testing an application (Fig. 1) comprising:

transmitting a series of business layer data and associated operations to an instance of a business layer of an application (Fig. 1, element 11), the application processing the test data and associated operations (col. 7, lines 1-9)

receiving business layer results of the associated operations (col. 6, lines 5-9)

Robertson fails to explicitly disclose comparing results.

Shupps teaches:

comparing the business layer results to recorded business layer results to determine whether the application is functioning properly (page 11, paragraph [0145]).

It would have been obvious to one of ordinary skill in the art at the time the invention to use the method of testing software applications of Robertson's in

combination with the method of application testing of Shupps et al. to effectively perform software application tests.

One of ordinary skill in the art at the time the invention would have been motivated to make the combination because Robertson discloses a the system comprises a set of servers and an httpd user interface, which communicate with each other in a standardized format, such as XML (Fig. 1). Shupps et al discloses a system and method for testing an application is applicable to web-enabled applications (page 3, paragraph [0058]) such as applications that can generate XML (page 4, paragraph [0074]).

As per claim 9, Robertson discloses formatting the business layer data and/or associated operations in a location/language-neutral format prior to providing the business layer data to the instance of the business layer (col. 7, lines 37-42).

As per claim 10, Robertson discloses the location/language-neutral format is defined by an XML schema (col. 7, lines 49-54).

As per claim 11, Robertson discloses formatting the business layer results in a location/language-neutral manner (col. 7, lines 37-42).

As per claim 12, Robertson discloses reading the series of business layer data and associated operations from a test script stored on a test workstation (col. 7, lines 1-9).

Related Prior Art

The following prior art is considered to be pertinent to applicant's invention, but nor relied upon for claim analysis conducted above.

Muller et al. (U.S. PGPUB No. 20040044993), "Testing versions of applications".

Gupta (U.S. PGPUB No. 20040205565), "XML based report generator".

Boilen et al. (U.S. PGPUB No. 20040199818), "Automated testing of web services".

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elmira Mehrmanesh whose telephone number is (571) 272-5531. The examiner can normally be reached on 8-5 M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W. Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2113

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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